

Q1. a position sensor responsive to magnetic fields for generating signals for determining position and orientation coordinates of the catheter distal end.

C2 Claim 74. (Amended) The system for percutaneous treatment of Claim 69, wherein the position sensor includes at least two non-coplanar magnetic elements.

sub D3 Claim 83. (Amended) A method of treating a patient's heart comprising the steps of:

- (a) percutaneously inserting a catheter into a heart of a patient, the catheter having a proximal end and a distal end, an active portion at the distal end of the catheter for applying laser energy, and a position sensor responsive to magnetic fields for generating signals;
- (b) sensing the position of the catheter distal end using magnetic fields and the signals generated by the position sensor by determining position and orientation coordinates of the catheter distal end;
- (c) using the position sensor to reference the catheter distal end based on the position and orientation coordinates;
- (d) positioning the catheter such that its distal end is adjacent tissue of the heart to be treated based on the position and orientation coordinates; and
- (e) applying laser energy from the active portion to the patient's heart tissue.